

VERSION DESCRIPTION DOCUMENT FOR THE NASA EQUIPMENT MANAGEMENT SYSTEM (NEMS) CENTRAL

Release 4.9

NASA-NEMSCENT-VDD-13

PrISMS Contract

August 31, 2001



National Aeronautics and
Space Administration

George C. Marshall Space Flight Center
Huntsville, AL 35812

**VERSION DESCRIPTION DOCUMENT FOR THE
NASA EQUIPMENT MANAGEMENT SYSTEM (NEMS) CENTRAL
RELEASE 4.9**

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
GEORGE C. MARSHALL SPACE FLIGHT CENTER
HUNTSVILLE, ALABAMA

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GEORGE C. MARSHALL SPACE FLIGHT CENTER
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1. **INTRODUCTION**

This Version Description Document (VDD) describes the changes and installation procedures for this release of the NASA Equipment Management System (NEMS) Central. This section identifies the release, describes its purpose, defines its scope, and identifies its contact points.

1.1. **IDENTIFICATION OF THE RELEASE**

This software release is identified as NEMS Central, Release 4.9 and has an effective release date of August 31, 2001.

1.2. **PURPOSE OF THE RELEASE**

This release implements modifications for the following Change Control Requests (CCRs):

<u>CCR</u>	<u>Title</u>
271	Add Demil Code to NEMS
284	Transaction 13 delete record from NEMS-CENT-TRANSFER file
286	Add Warning banner to start-up program
291	Reload NEMS Central

This release implements modifications necessitated by the following Discrepancy Reports (DRs):

<u>CCR</u>	<u>Title</u>
None	None

1.3. **SCOPE**

This VDD provides the functional and technical user of NEMS Central with information regarding the content, status, and structure of Release 4.9, including the following:

- Changes implemented since Release 4.8.1;
- Validation procedures to ensure the reliability of release changes;
- References to other documentation affected by this release;
- Detailed software installation instructions.

No waivers are associated with this release.

1.4. CONTACT POINTS

Sustaining Engineering for NEMS Central is provided through the Consolidation Center (CC) located at Marshall Space Flight Center (MSFC). Questions regarding the functional and/or the technical aspects as well as the installation of this release should be directed to:

The NACC Technical Services Center (Use following Key Words: SESAAS & NEMS Central)

Telephone: (256) 544-6673
Email: neal.cantrell@msfc.nasa.gov
FAX: (256) 544-1836

2. FUNCTIONAL INFORMATION

This section includes details regarding functional changes, functional interfaces, critical issues, affected documents, and application system administration.

2.1. FUNCTIONAL CHANGES

Please refer to Appendix C, Functional Change Validation Procedures, for a description of all functional changes related to this release. Appendix D, Installation Instructions, describes all Software PREDICT changes related to this release.

2.2. FUNCTIONAL INTERFACES

This section is not applicable for this release.

2.3. CRITICAL ISSUES

This section is not applicable for this release.

2.4. AFFECTED DOCUMENTS

No documents are affected by this release.

2.5. APPLICATION SYSTEM ADMINISTRATION

There are no application system administration changes associated with this release.

3. TECHNICAL INFORMATION

This section includes details regarding technical system interfaces, data dictionary changes, software object changes, and database administration activities.

3.1. TECHNICAL SYSTEM INTERFACES

This section is not applicable for this release.

3.2. DATA DICTIONARY CHANGES

Refer to Appendix D, Section 4.0, for the data dictionary changes in this release.

3.3. SOFTWARE OBJECT CHANGES

Modules affected by this release are included in Appendix D, Section 2.2.

3.4. DATABASE ADMINISTRATION

This section describes the database administration activities for installation of this release.

3.4.1. Release Dataset Names

Refer to Appendix D, Introduction section, for the release dataset names.

3.4.2. Inventory of Objects

Refer to Appendix D, Section 2.1, for an inventory of Natural object types.

3.4.3. Storage Considerations

The changes represented by this release should not affect storage requirements.

3.4.4. Installation Procedures

Refer to Appendix D, Installation Instructions for NEMS Central Software Release 4.9 for detailed software installation procedures.

3.5. OPERATIONAL PREPARATION

Refer to the procedure described in Appendix D for assistance in preparing for proper installation and operational use of this release.

4. KNOWN AND OPEN PROBLEMS

There are no known or open problems related to this release.

APPENDIX A - ABBREVIATIONS AND ACRONYMS

CC	Consolidation Center
CCR	Change Control Request
CSC	Computer Sciences Corporation
DBA	Database Administrator
DR	Discrepancy Report
FAX	Electronic Facsimile Transmission
IRM	Information Resources Management
JCL	Job Control Language
MSFC	Marshall Space Flight Center
NACC	NASA Automated Data Processing (ADP) Consolidation Center
NASA	National Aeronautics and Space Administration
NEMS	NASA Equipment Management System
NPDMS	NASA Property Disposal Management System
SESAAS	Sustaining Engineering Support for Agencywide Administrative Systems
VDD	Version Description Document

APPENDIX B - GLOSSARY

Database Administration

Responsibility for maintaining the physical database environment.

Implementation

The process by which a NASA site installs a NASA software release and places it into operational use.

Operational Preparation

Preparation by a NASA site for installation and use of a NASA application release.

System Administration

Responsibility for administrative functions such as application security and table data maintenance associated with a NASA application.

APPENDIX C - FUNCTIONAL CHANGE VALIDATION PROCEDURES

Index of validation procedures for changes in this release:

Section	CCR	Title
1.0	271	Add Demil Code to NEMS
2.0	284	Transaction 13 delete record from NEMS-CENT-TRANSFER file
3.0	286	Add Warning banner to start-up program
4.0	291	Reload NEMS Central

Details for the validation procedures follow:

1.0 CCR 271 – Add Demil Code to NEMS.

Currently NEMS does not contain the Demilitarization Code.

Description of Change

Code was changed to accommodate the addition of the demil code.

Functional Impact

There is no functional impact as a result of this CCR.

Validation Procedures

- Do static adhoc using the Equipment File by Contractor Tag No, ECN, Old Tag No., and Previous ECN.
Expected Results: The demil code should be displayed for each of the adhoc.
- Do static adhoc using the History File by ECN, given ECN, Old Tag No., and Previous ECN.
Expected Results: The demil code should be displayed for each of the adhoc.
- Do a static adhoc using the Transfer File by ECN.
Expected Results: The demil code should be displayed.
- Do a dynamic adhoc using the Equipment File.
Expected Results: The demil code should be displayed.

<u>MODULE ID</u>	<u>MODULE NAME</u>	<u>TYPE</u>
ADHOC006	Adhoc Selection by ECN	Program
ADHOC201	Adhoc Central Equip File by ECN	Program
ADHOC202	Adhoc Central Equip File by Old Tag No.	Program
ADHOC203	Adhoc Central Equip File by previous ECN	Program
ADHOC204	Adhoc Central Equip File by Contractor Tag No.	Program
ADHOC20A	Adhoc Central History File by ECN	Program
ADHOC20B	Adhoc Central History File by Old Tag No.	Program
ADHOC20C	Adhoc Central History File by previous ECN	Program
ADHOC20D	Adhoc Central History File by Contractor Tag No.	Program
ADHOC213	Adhoc Central History File by ECN	Program
ADHOC21F	List Data Elements Available for Display	Program
RPTEQUP1	Extract Equip Records to create Backup File	Program
RPTHSTP1	Extract History Records to create Backup File	Program
TRN000P2	Transaction Extract from Central to Centers	Program
TRN001P1	Add Trans 01 (Receipt by Purchase – NASA)	Program
TRN004P1	Add Trans 04 (Receipt by Transfer from NASA)	Program
TRN006P1	Add Trans 06 (Receipt by Transfer from Contractor)	Program
TRN010P1	Add Trans 10 (Receipt from Fabrication)	Program
TRN011P1	Add Trans 11 (Receipt from Assembly/Disassembly)	Program
TRN012P1	Add Trans 12 (Receipt from Found on Station)	Program
TRN013P1	Add Trans 13 (Receipt from Excess)	Program
TRN015P1	Add Trans 15 (Receipt from ROR from History)	Program

TRN016P1	Add Trans 16 (Receipt from Transfer Real/Person)	Program
TRN017P1	Add Trans 17 (Receipt from Non-Govt Source)	Program
TRN018P1	Add Trans 18 (Receipt from not previously criteria)	Program
TRN021P1	Add Trans 21 (Receipt – Lease to Purchase)	Program
TRN060P1	Change Trans 60 (NASA Held Equip Record Data)	Program
TRN065P1	Delete Trans 65 (Transfer to Another NASA Install)	Program
TRNRELC1	Capitalization Value Calculation	Copycode
TRNX00P1	NPDMS Delete Transaction X00	Program
TRNX15P1	NPDMS Add X15	Program
TRNX60P1	Controlled Receipt/Reverse Receipt/Control Change	Program
TRNX65P1	Delete Transaction X65	Program
TRNX90P1	Change Transaction X90 (Disposition of Equip)	Program
UPNCTS02	Update Error Table	Program

2.0 CCR 284 – Transaction 13 delete record from NEMS-CENT-TRANSFER file.

If a record is added back into NEMS with transaction 13 (Receipt from Excess) the ECN is not being deleted from the NEMS-CENT-TRANSFER file.

Description of Change

Code was changed to delete the ECN from the NEMS-CENT-TRANSFER file.

Functional Impact

There is no functional impact as a result of this CCR.

Validation Procedures

- Complete a transaction 65 in NEMS. Run the NEMS/NEMS Central Batch.
Expected Results: ECN will be on NEMS-HISTORY File.
- Add the same ECN to NPDMS to create an X90 transaction. Run the NEMS/NEMS Central Batch.
Expected Results: The ECN will be on the NEMS-CENT-TRANSFER file and the NEMS-HISTORY file.
- In NPDMS, do a disposition T05 of the case number that was previously added.
Expected Results: A disposition T05 was performed on the case number.
- Then do a transaction 13 in NEMS on the ECN. Run the NEMS/NEMS Central Batch.
Expected Results: The ECN should be removed from the NEMS-CENT-TRANSFER file and NEMS-HISTORY file and placed on the NEMS-Equip file.

<u>MODULE ID</u>	<u>MODULE NAME</u>	<u>TYPE</u>
TRN013P1	Add Transaction 13 (Receipt from Excess)	Program

3.0 CCR 286 – Add Warning banner to start-up program.

Adding warning banner to start-up program.

Description of Change

Code was changed to add a warning banner before the system banner.

Functional Impact

There is no functional impact as a result of this CCR.

Validation Procedures

- Logon to NEMS Central.
Expected results: A warning banner should appear before the system banner.

<u>MODULE ID</u>	<u>MODULE NAME</u>	<u>TYPE</u>
ADHOCENT	NEMS Central Start-up Program	Program
NEMS	NEMS Central Start-up Program	Program
NEWARNMA	NEMS Central Warning Map	Map

4.0 CCR 291 – Reload NEMS Central

The NEMS Central Equipment and History files need to be reloaded with data from the center's Equipment and History files.

Description of Change

Code was changed to unload the Equipment and History files from the centers.

Functional Impact

There is no functional impact as a result of this CCR.

Validation Procedures

- Run NCEQJPL (in batch).
Expected results: A file is created.

<u>MODULE ID</u>	<u>MODULE NAME</u>	<u>TYPE</u>
NCEQJPL	Expand JPL Data to NEMS-Cent-Equipment Format	Program

APPENDIX D - INSTALLATION INSTRUCTIONS AND CHECKLIST FOR NEMS CENTRAL SOFTWARE RELEASE 4.9

Introduction

Release information:

System Name: NEMS Central
Release Number: 4.9
Release Date: August 31, 2001
Effective Date: Immediately

In case of installation problems, contact the NASA Automated Data Processing (ADP) Consolidation Center (NACC) Technical Services Center (Use following Key Words: SESAAS & NEMS Central)

Telephone: (256) 544-6673
Email: neal.cantrell@msfc.nasa.gov
FAX: (256) 544-1836

The following datasets are located on the transient storage DASD volumes under the following data sets names:

- MSMOV.NEMC.PROD.R490.R0801.PRD
- MSMOV.NEMC.PROD.R490.R0801.SRC

Installation Sequence

The sequence in which the installation of this release should occur is provided in the following list. A checklist is provided in Section 9.0 to assist in tracking the installation of this release.

- 1.0 Back Up Existing Data
- 2.0 Copy Source/Object Code
- 3.0 Pre-Predict Data Conversion
- 4.0 Install Predict
- 5.0 Catalog Source Code
- 6.0 Post-Predict Data Conversion
- 7.0 Perform Release-Specific Procedures
- 8.0 Local JCL Mods
- 9.0 Installation Checklist

1.0 Back Up Existing Data

It is advisable to back up all NEMS CENTRAL files as a precautionary measure prior to installation.

2.0 Copy Source/Object Code

2.1 Copy Source Code

Load the NEMS Central source library from dataset:
MSMOV.NEMC.PROD.R490.R0801.SRC.

The source programs were unloaded using the Natural utility NATUNLD. The programs will be loaded to the application library NEMSCENT, replacing any existing programs of the same name. The source module counts included in this release are listed below:

Natural Source Modules by Type	
GLOBAL DATA AREA	0
LOCAL/PARAM DATA AREA	0
MAPS	1
HELP ROUTINES	0
SUBROUTINES	0
SUBPROGRAMS	0
PROGRAMS	37
COPYCODE	1
TEXT	0
PROCESS	0
MISCELLANEOUS OBJECTS	0
Total:	39

2.2 List of Source Code Modifications

The following are the modules added, modified and deleted.

Added Modules:

1. NCEQJPL Program
2. NEWRNCMA Map
3. UPNCTS02 Program

Changed Modules:

1. ADHOC006 Program
2. ADHOC201 Program
3. ADHOC202 Program
4. ADHOC203 Program
5. ADHOC204 Program
6. ADHOC20A Program
7. ADHOC20B Program
8. ADHOC20C Program
9. ADHOC20D Program
10. ADHOC213 Program
11. ADHOC21F Program
12. ADHOCENT Program
13. NEMS Program
14. RPTEQUP1 Program
15. RPTHSTP1 Program
16. TRN000P2 Program
17. TRN001P1 Program
18. TRN004P1 Program
19. TRN006P1 Program
20. TRN010P1 Program
21. TRN011P1 Program
22. TRN012P1 Program
23. TRN013P1 Program
24. TRN015P1 Program
25. TRN016P1 Program
26. TRN017P1 Program
27. TRN018P1 Program
28. TRN021P1 Program
29. TRN060P1 Program
30. TRN065P1 Program
31. TRNRELC1 Copycode
32. TRNX00P1 Program
33. TRNX15P1 Program
34. TRNX60P1 Program
35. TRNX65P1 Program
36. TRNX90P1 Program

Delete Modules:

Not applicable with this release.

2.3 Copy Object Modules

Not applicable with this release.

3.0 Pre-Predict Data Conversion

Not applicable with this release.

4.0 Install Predict

4.1 Data Dictionary Changes

This release will include the new enhancements for version 4.9.0. Details for changes in this release can be found under paragraph 4.1.3 Physical File Changes or by performing PREDICT reporting on the keyword NEMS-CENT-4.9.0.

Use SYSDICBE to load the PREDICT modifications from the dataset MSMOV.NEMC.PROD.R490.R0801.PRD.

The following NEMS Central DDMs should be generated after the PREDICT load is complete.

NEMS-CENT-EQUIP
NEMS-CENT-EQUIP-VIEW
NEMS-CENT-HISTORY
NEMS-CENT-HISTORY-VIEW
NEMS-CENT-TABLE
NEMS-CENT-TRANSFER

4.1.1 Inventory of Objects

The object types and inventory listed below represent a comprehensive count of the PREDICT object modules for this release.

PREDICT Objects by Type:

Keyword	-	1
Standard Files	-	0
Conceptual Files	-	0
ADABAS Files and Views	-	9

4.1.2 Storage Considerations

The changes represented by this release should not have significant affect on storage requirements.

4.1.3 Physical File Changes

Use the ADABAS Utility commands listed below to build the JCL for file changes. The ADADBS control statements can be cut and pasted into the TSO ISPF editor. Call Rick Bishop (256)544-5352 with any questions or problems.

Add the following fields:

NEMS-CENT-EQUIP		File # 040							
Ty	L	Field name	F	Length	Occ	D	U	DB	S
*-	-	-----	*-	-----	-----	*	*	--	*
	1	DEMIL-CODE	A	1.0				AS	N
	1	WEB-DISPLAY-IND	A	1.0				AN	N

Using the following commands:

```
ADADBS NEWFIELD FILE=040
ADADBS FNDEF='01,AS,1,A,NU'
ADADBS FNDEF='01,AN,1,A,NU'
```

NEMS-CENT-HISTORY		File # 041							
Ty	L	Field name	F	Length	Occ	D	U	DB	S
*-	-	-----	*-	-----	-----	*	*	--	*
	1	DEMIL-CODE	A	1.0				AS	N

Using the following commands:

```
ADADBS NEWFIELD FILE=041
ADADBS FNDEF='01,AS,1,A,NU'
```

NEMS-CENT-TABLE		File # 044							
Ty	L	Field name	F	Length	Occ	D	U	DB	S
*-	-	-----	*-	-----	-----	*	*	--	*
	1	T-DEMIL-RANK-NMBR	N	2.0				AA	N
MU	1	T-DEMIL-CODE-DESC	A	240.0	2			AD	N

Using the following commands:

```
ADADBS NEWFIELD FILE=044
ADADBS FNDEF='01,AA,2,U,NU'
ADADBS FNDEF='01,AD,240,A,MU,NU'
```

NEMS-CENT-TRANSFER

File # 042

Ty	L	Field name	F	Length	Occ	D	U	DB	S
*-	-	-----	*-	-----	-----	*	*	--	*
	1	DEMIL-CODE	A	1.0				AY	N

Using the following commands:

```
ADADBS NEWFIELD FILE=042
ADADBS FNDEF='01,AY,1,A,NU'
```

Invert the following superdescriptors:

NEMS-CENT-EQUIP

File # 040

Ty	L	Field name	F	Length	Occ	D	U	DB	S
*-	-	-----	*-	-----	-----	*	*	--	*
SP	1	WEB-FSC	A	5.0		D		SC	N
SP	1	WEB-ITEM-NAME	A	31.0		D		SD	N
SP	1	WEB-MFG-CODE	A	6.0		D		SE	N
SP	1	WEB-MFG-MODEL-NO	A	21.0		D		SF	N
SP	1	WEB-COST	A	12.0		D		SH	N

Using the following commands:

```
ADADBS NEWFIELD FILE=040
ADAINV SUPDE='SC=AN(1,1),AH(1,4) '
ADAINV SUPDE='SD=AN(1,1),AC(1,30) '
ADAINV SUPDE='SE=AN(1,1),AD(1,5) '
ADAINV SUPDE='SF=AN(1,1),AE(1,20) '
ADAINV SUPDE='SH=AN(1,1),AI(1,11) '
```

5.0 Catalog Source Code

Run a batch job to catalog (CATALL) all modules in the NEMSCENT or other named library. It is not necessary to catalog the Global Data Area. You should receive 5 NATURAL 0002 errors for modules beginning with ADHOC21* that concern trying to stow a dynamic program. It is not necessary to attempt to resolve the 5 errors. The NASA Batch Standard Parameters should be used for the compile.

After all objects are compiled, the NEMS CENTRAL application will run under the NASA On-line Standard Parameter.

6.0 Post-Predict Data Conversion

There is no post-Predict data conversion required.

7.0 Perform Release-Specific Procedures

7.1 Update Table S02

Run UPNCTS02 (online or batch) to update the error messages.

8.0 Local JCL Mods

There are no Local JCL Mods with this release.

9.0 Installation Checklist

- 1.0 Back Up Existing Data
- 2.0 Copy Source/Object Code
 - 2.1 Copy Source Code
 - 2.2 List of Source Code Modifications
 - 2.3 Copy Object Modules
- 3.0 Pre-Predict Data Conversion
- 4.0 Install Predict
 - 4.1 Data Dictionary Changes
 - 4.1.1 Inventory of Objects
 - 4.1.2 Storage Considerations
 - 4.1.3 Physical File Changes
- 5.0 Catalog Source Code
- 6.0 Post-Predict Data Conversion
- 7.0 Perform Release-Specific Procedures
 - 7.1 Update Table S02
- 8.0 Local JCL Mods